RiskKAN Working Group: Climate Change, Disasters, Health and Well-being

Working Group Leads

- Martha Marie Vogel, Red Cross Red Crescent Climate Centre (vogel@climatecentre.org)
- Nivedita Sairam, GFZ Potsdam (nivedita@gfz.de)
- Marleen C. de Ruiter, Vrije University Amsterdam, Institute for Environmental Studies, the Netherlands (m.c.de.ruiter@vu.nl)
- **Jo-Ting Huang-Lachmann**, Climate Service Centre, Germany (jo-ting.huang-lachmann@hereon.de)

Rationale

Climate change, urbanisation, land degradation, and systemic interdependencies are intensifying the frequency and complexity of disasters. When natural hazards and disease outbreaks co-occur, they create cascading effects that amplify health and well-being impacts. The COVID-19 pandemic highlighted how mobility restrictions and disrupted health systems complicated disaster response, while recent events such as floods in Pakistan demonstrated how hazards can directly trigger disease outbreaks.

Despite advances in single-hazard monitoring and response, the scientific and operational understanding of compound, cascading, and interacting risks at the intersection of climate change, disasters, and health remains fragmented. This gap creates significant operational, ethical, and decision-making challenges for society, disaster managers, and aid organisations.

This working group responds to this need by providing a collaborative platform for researchers, practitioners, and policymakers to co-develop knowledge and solutions on multi-hazard health risks, cascading impacts, and preparedness approaches. By bridging disciplines and sectors, the group seeks to strengthen science-policy-practice linkages and contribute to global agendas on disaster risk reduction, climate adaptation, and sustainable development.

Aims

- Advance scientific understanding of how natural hazards and disease outbreaks interact, including cascading and compounding impacts on health and well-being.
- Foster innovation in modelling, measurement, and monitoring of multi-hazard and health interactions, including integration of remote sensing, epidemiological, and socio-demographic data.
- Bring together diverse disciplinary perspectives and practitioner knowledge to develop systemic and people-centred approaches for disaster preparedness and response.
- Encourage cross-regional dialogue and comparative learning, while being attentive to the importance of context-specific and locally grounded approaches.

• Generate actionable knowledge to inform risk reduction, adaptation management, and anticipatory action, supporting inclusive and timely decision-making.

Planned activities

- Host bimonthly online sessions to showcase ongoing research, case studies, and emerging practices on the intersections of disasters, health, and well-being.
- Engage in major conferences and workshops (e.g., EGU, AGU, Adaptation Futures) through dedicated sessions, fostering collaboration across scientific and practitioner communities.
- Produce and disseminate outputs such as peer-reviewed publications, practice briefs, and policy notes to stimulate debate and inform decision-making.
- Organize targeted workshops, both online and in person, to enable co-production of knowledge and strengthen capacity among researchers, practitioners, and policymakers.
- Serve as a liaison between practice and research by identifying priorities, amplifying underrepresented voices, and supporting inclusive approaches to risk reduction and preparedness.